Public Notice

US ARMY CORPS OF ENGINEERS
St. Louis District
Gateway to Excellence

Reply To:
U.S. Army Corps of Engineers
Attn: CEMVS-OD-F
1222 Spruce Street
St. Louis, MO 63103-2833

Public Notice No.
P-2522b
Public Notice Date
February 1, 2007

Expiration Date
February 21, 2007

Postmaster Please Post Conspicuously Until:

This public notice is related to previous public notice P-2522, originally issued on February 17, 2006 (see http://www.mvs.usace.army.mil/permits/pn/p-2522.pdf).

Interested parties are hereby notified that a revised application has been received, requesting authorization under Section 404 of the Clean Water Act, to impact a portion of Belleau Creek, two unnamed tributaries to Belleau Creek and an adjacent emergent wetland, as described below and shown on the attached drawings.

COMMENTS AND ADDITIONAL INFORMATION: Comments on the described work should reference the U.S. Army Corps of Engineers Public Notice Number **P-2522b** and must reach this office no later than the above expiration date to become part of the record and to be considered in the permit decision process. Comments should be mailed to the following address:

U.S. Army Corps of Engineers
ATTN: CEMVS-OD-F (Charles Frerker)
1222 Spruce Street
St. Louis, Missouri 63103-2833

APPLICANT: Mr. Todd Dwyer, Bramblett Crossing L.L.C., 913 Lafayette Landing Place, St. Charles, Missouri 63303 (636-240-7662).

LOCATION: The project area is located immediately northeast of the Highway K and Mexico Road intersection in St. Peters, St. Charles County, Missouri (See Attached Location Map).

PROJECT DESCRIPTION: Since issuance of the original public notice, P-2522, the applicant has supplied revised submittals to address changing development proposals, to reduce environmental impacts, and to address significant concerns raised during the original public notice comment period. The revised plans propose a mixed-use residential and commercial development, in lieu of all commercial development, on the approximate 34.6-acre parcel. The parcel of land contains approximately 2,200 linear feet of Belleau Creek, two unnamed tributaries (designated as Tributaries A and B, with total lengths of 160 and 1280 LF, respectively) and an approximate 0.11-acre emergent wetland.

Belleau Creek bisects the site in a southwest to northeast direction. This portion of Belleau Creek is a stable, fully functioning and diverse, perennial watershed that exhibits streambed widths ranging from 20 to 40 feet, with a gravel and cobble substrate, bordered by a functioning wooded riparian corridor extending approximately 50 feet from its southern bank and approximately 50 to greater than 150 feet along its northern bank. The primary tree species found within the creek corridor include a mixture of mature silver maple, box elder, cottonwood, and sycamore. This section of Belleau Creek, and its riparian corridor, supports a variety of migratory birds, fish, amphibians, reptiles and invertebrate species. Largemouth bass, stone rollers, green

sunfish, madtom, orangethroat darter, creek chub, mosquito fish, bluegill, red-bellied dace, caddisfly larvae, and crayfish inhabit this portion of Belleau Creek. Deer, turkey, waterfowl and other animals also utilize this portion of Belleau Creek and its riparian corridor.

The applicant seeks approval to denude, grade and fill in approximately 525 linear feet of Belleau Creek and its riparian corridor, starting in the southwest corner of the parcel. The physical location of 525 linear feet of Belleau Creek would be relocated to the south, towards Mexico Road, in a new 605 linear feet section of narrower and less diverse channel. The purpose of relocating Belleau Creek is to provide space for 2 commercial lots at Highway K and Mexico Road. The applicant contends visibility by vehicular traffic is critical for those two commercial lots and will be accomplished by the creek's relocation and subsequent re-vegetation with shorter growing species. Additionally, the applicant contends the condominium development would also benefit from higher visibility via the relocated channel. The applicant states the condominium development may not be viable if passerby's and potential owners are not able to see the buildings from Mexico Road or Highway K. Parcels adjacent to major intersections are typically under intense development pressure.

Belleau Creek would incur indirect and secondary impacts by the proposed construction of a retaining wall near the relocated channel's right descending bank. A minimum 8.5 feet width would be established between the top of the relocated channel's right descending bankline and the approximate 6-feet-high retaining wall. It is unknown if the retaining wall would be higher or lower along other portions of the relocated channel. Approximately 100 linear feet of the relocated channel's right descending bank would be constructed within a minimum of 8.5 feet from the retaining wall. The left descending bank of the relocated channel would have a minimum 8.5 feet width from the top of its bank to the base of a proposed 2:1 vegetated side slope. The applicant stated the corridor along the relocated channel would be planted with shorter, height restricted, vegetation to ensure it does not block the view of the proposed development features from potential customers and potential condominium residents passing by on Highway K and Mexico Road.

The proposed site grading and channel relocation activities would reduce the floodplain limits within most of the on-site Belleau Creek corridor to less than half of its current limits. The applicant would be required to monitor the survival and success of the shorter growing vegetation in the narrowed floodplain corridor for a minimum of 10 to 15 consecutive years. Vegetation monitoring is typically only required for 5 consecutive years. There is a higher probability that the constricted floodplain limits in the relocated portion of Belleau Creek would increase flow heights, energy and velocities to an extent that it could harm or kill the height restricted vegetation or periodically destabilize the bankline of the relocated section of Belleau Creek. Selectively planting height-restricted vegetation does not allow a sizeable watershed, such as Belleau Creek, to support a wide variety of naturally occurring riparian corridor species. The applicant will be required to submit additional professional engineer (PE) certified hydrological calculations to the Corps of Engineers for further analysis of potential negative affects such as, restricting the floodplain, increasing flow velocity and flood heights, inducing stream headcutting and bankline instability, altering natural vegetation communities or inducing vegetation mortality, etc. If a permit were issued after going through the evaluation process, the applicant would be required to monitor a set distance of the upstream, on-site and downstream portions of Belleau Creek for a minimum of 10 consecutive years to ensure the project proposal has no negative affects on the channel or watershed functions. The applicant would also be required to set aside a commensurate amount of financial assurance to possibly pay for independent, third party stabilization designs and to cover the cost of physically completing any necessary corrective bank stabilization and watershed damages discovered during the minimum 10 year monitoring period. Additional monitoring and/or the cost of studying and implementing a complete redesign of the relocated channel would be the responsibility of the applicant if the current proposal were determined to be the cause of continued bank stabilization problems, induced flooding on neighboring properties or the cause of other significant watershed impacts.

An additional indirect and secondary impact to Belleau Creek would occur immediately downstream of the relocated channel by the proposed installation of an approximate 123 linear feet, 42-inch arch span culvert. The purpose of the road crossing structure is to provide access to commercial stores and condominiums on the north side of Belleau Creek.

Other direct, indirect and secondary impacts to Belleau Creek would be caused by the proposed actions:

- Installing 260 linear feet of boulder sized stone along six outer bends of the existing and relocated channel for toe slope protection;
- Riparian corridor encroachment to construct a wing wall 6 feet from the existing channel (located along the left descending bank, immediately downstream of the proposed bridge crossing structure);
- Conducting grading activities at several locations in the existing riparian corridor and in near proximity to the top of bank to accommodate development of the condominiums, related infrastructure and attendant features, and to construct the detention basins;
- Redirecting Tributary A's flow into a 48-inch reinforced concrete pipe, which would ultimately flow into Belleau Creek (a concrete pipe has a nearly smooth bottom with no natural features or functions to slow flow velocity, filter unwanted materials or allow vegetation and habitat for aquatic life during periodic high water events);
- Redirecting consolidated on-site runoff and energy into three detention basin outfall structures, which would be trenched and directed in Belleau Creek.

The on-site detention basins would discharge collected storm water, on-site runoff and parking lot runoff into Belleau Creek. The applicant would install a sand filtration device to remove some of the unwanted materials before entering Belleau Creek. An offsite detention basin, with a 30-inch diameter outfall structure, would also be trenched through the natural bankline of Belleau Creek. Each of the detention basins are located downstream of the proposed channel relocation and constricted floodplain area. Construction of adequately sized detention basins is required to compensate for the proposed activities loss of storm water storage and increased flow velocity. Erosion control blankets would be installed beneath each of the proposed detention basin's associated outfall structures in attempt to offset possible bank instability. The two on-site detention basins' outfall structures would discharge through 30 and 36 inch pipes located directly across from one another. The pipes are located at the eastern edge of the applicant's property boundary. Accumulated on-site storm water, surface runoff and flows generated by the site would continue in an eastern direction, off of the applicant's property, into Belleau Creek. The off-site detention basin would be constructed to further hydrologically compensate for increased runoff and erosive flow energy that the on-site restricted channel relocation and floodplain development activities induce upon the Belleau Creek watershed. The applicant contends the design of the channel relocation and the downstream on and off site detention basins provide storage volume for a 100-year storm event equal to existing conditions.

The existing flow path of "Tributary A", as shown on the attached drawing, enters the site from a culvert crossing located at the corner of Mexico Road and an abandoned frontage road on the southern border of the project site. "Tributary A" then extends approximately 160 feet to the northwest to its existing confluence with Belleau Creek. "Tributary A" has an average bed width of 1.5 feet to 2 feet, primarily composed of sediment. Scattered box elder and silver maple vegetate the corridor of Tributary A. Fish periodically utilize "Tributary A", particularly near its confluence with Belleau Creek. The applicant proposes to impact this watershed by denuding, grading and enclosing the entire 160 linear feet channel into an approximate 225 linear feet, 48-inch-diameter, reinforced concrete pipe. The flow and energy of "Tributary A" would be redirected into the enclosed pipe before discharging into the relocated portion of Belleau Creek.

A second unnamed tributary, designated as "Tributary B" on the attached drawings, is located in the northern portion of the site. "Tributary B" flows east and southeast through the site for approximately 1,280 feet before connecting with Belleau Creek. The gravel based channel of "Tributary B" ranges in width from 2 to 5 feet. The current proposal would induce indirect and secondary impacts upon "Tributary B" by the required installation a 20-foot arch span culvert. The crossing is requested to provide access to one of the on-site detention basins. The applicant originally proposed a 195 linear feet span culvert structure at the same location. The structure was reduced to 20 feet to minimize impacts. Some grading activities associated with the establishment of the condominiums would occur in close proximity to "Tributary B". One such location induces direct impacts by the required installation of 20 linear feet of riprap along the toe of "Tributary B", for bank stability purposes.

The final project induced impact involves an approximate 0.11-acre emergent wetland in the northeastern portion of the project area. The wetland would be filled in to facilitate grading and development of the residential condominium area.

In summary, the proposed project would cause **943** linear feet of jurisdictional waterway impacts (800 feet of direct impacts and 143 feet of indirect/secondary impacts), and **0.11** acre of wetland impacts. The original public notice plan proposed impacts to **3,660** linear feet of jurisdictional waterways and **0.11** acre of wetland

The applicant discussed a proposed 2.3-acre stream mitigation area, located downstream of the proposed development site. It is unknown if the applicant proposes to compensate for all project induced impacts (Belleau Creek, Tributary A, Tributary B and the emergent wetland) at this area. The applicant must first demonstrate that all measures to avoid and minimize impacts to all on-site jurisdictional waters of the United States have been considered and exhausted before the Corps will consider mitigation. This process is known as sequencing under Section 404 of the Clean Water Act. A very large mitigation area and significant mitigation measures would be required to attempt compensatory mitigation measures for temporary or possible permanent impacts induced upon this fully functioning, high quality, perennial section of Belleau Creek. The United States Environmental Protection Agency (EPA) supplied a previous public notice comment letter designating this portion of Belleau Creek as an Aquatic Resource of National Importance (ARNI). The ARNI designation triggers review and coordination requirements between the Corps of Engineers and the EPA under Section 404(q) of the Clean Water Act.

Further details of the proposed impacts are shown on the attached drawings.

ADDITIONAL INFORMATION: Additional information may be obtained by contacting the applicant's consultant, Colonel Lee McKinney with McKinney Associates, at 636-530-1896 or Mr. Charles Frerker, Regulatory Project Manager, U.S. Army Corps of Engineers at either 314-331-8583 or electronic mail address: charles.f.frerker@mvs02.usace.army.mil

AUTHORITY: This permit will be processed under the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

WATER QUALITY CERTIFICATION: By issuance of this public notice, the project plans have been submitted to the Missouri Department of Natural Resources, Water Protection Program for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification, if issued, will express the Agency's opinion that the proposed activities will not violate applicable water quality standards. Written comments concerning possible impacts to waters of Missouri should be addressed to: Water Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, with copy provided to the Corps of Engineers.

SECTION 404 (b)(1) EVALUATION: The impact of the activity on the public interest will be evaluated in accordance with the Environmental Protection Agency guidelines pursuant to Section 404 (b)(1) of the Clean Water Act.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Request for public hearings shall state, with particularity, the reasons for holding the public hearing.

ENDANGERED SPECIES: The proposed project is within the range of the endangered Indiana bat (**Myotis sodalis**), Gray bat **(Myotis gricescens)**, and the threatened Bald eagle **(Haliaeetus leucocephalus)**. A preliminary determination, in compliance with the Endangered Species Act as amended, has been made that the proposed activity is not likely to affect species designated as threatened or endangered, or adversely affect critical habitat. In order to complete our evaluation, comments are solicited by this public notice from the U.S. Fish and Wildlife Service and other interested agencies and individuals.

CULTURAL RESOURCES: The St. Louis District will evaluate information provided by the State Historic Preservation Officer and the public in response to this public notice and we may conduct, or require a reconnaissance survey of the project area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that may reasonably be expected to accrue from the described activity must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the described activity, will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion, and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of these proposed activities. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Danny D. McClendon
Chief, Regulatory Branch

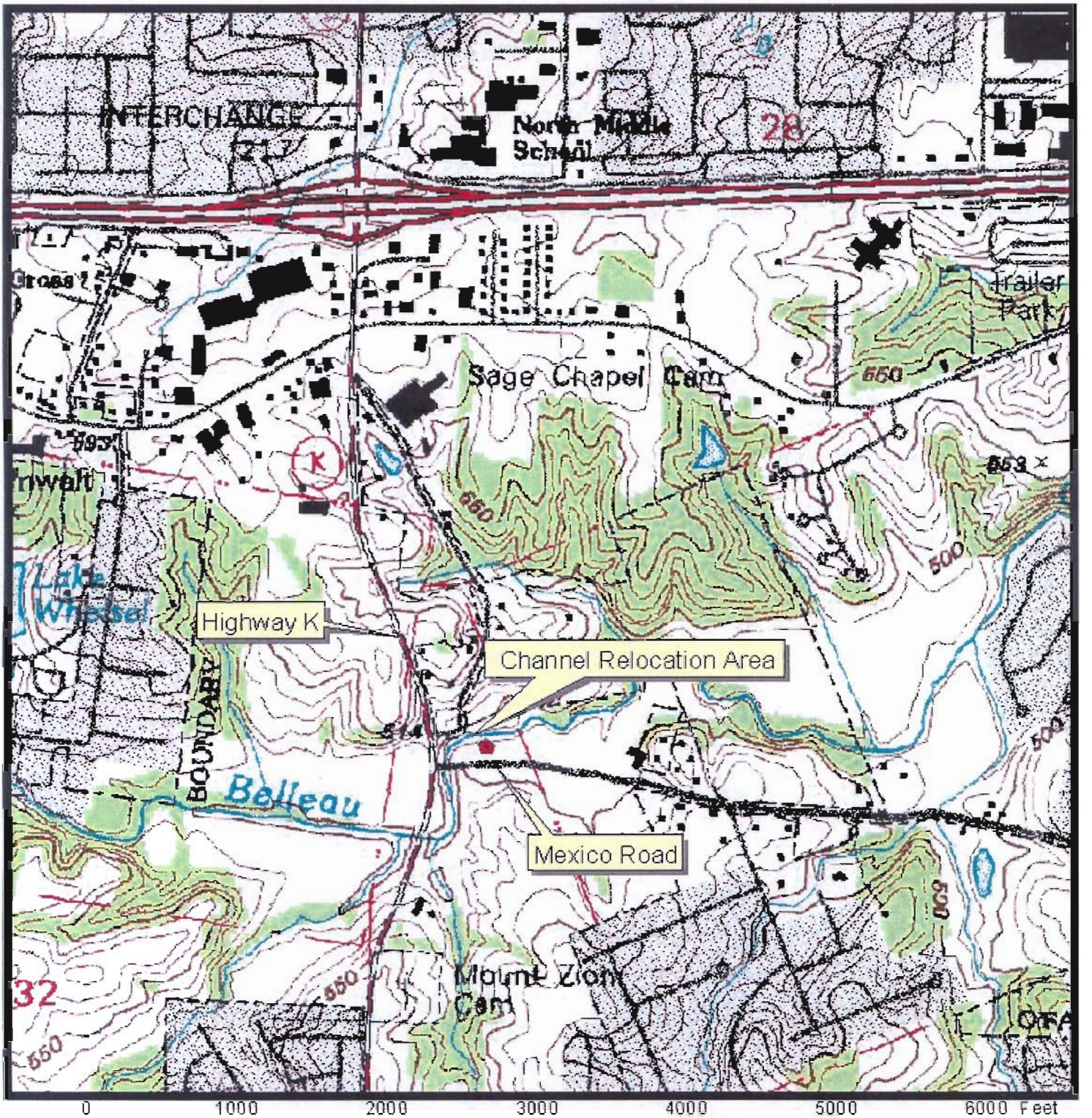
Attachments

NOTICE TO POSTMASTERS:

It is requested that this notice be conspicuously and continually placed for 21 days from the date of this issuance of this notice.

P2522b

Bramblett Crossing



Jan 29, 2007

Made By: Charles Frerker

State: Missouri
County: St Charles
Nearest City: O'Fallon
Latitude: 38:47:33.4837
(38.79263437)
Longitude: -90:41:48.8053
(-90.69689037)
USGS Quad: O Fallon

HUC 8 Name: Peruque-piasa
HUC 8 Number: 07110009
Section: 33
Township: 47 N
Range: 3 E
Q Section:
QQ Section:
Meridian: Fifth Principal

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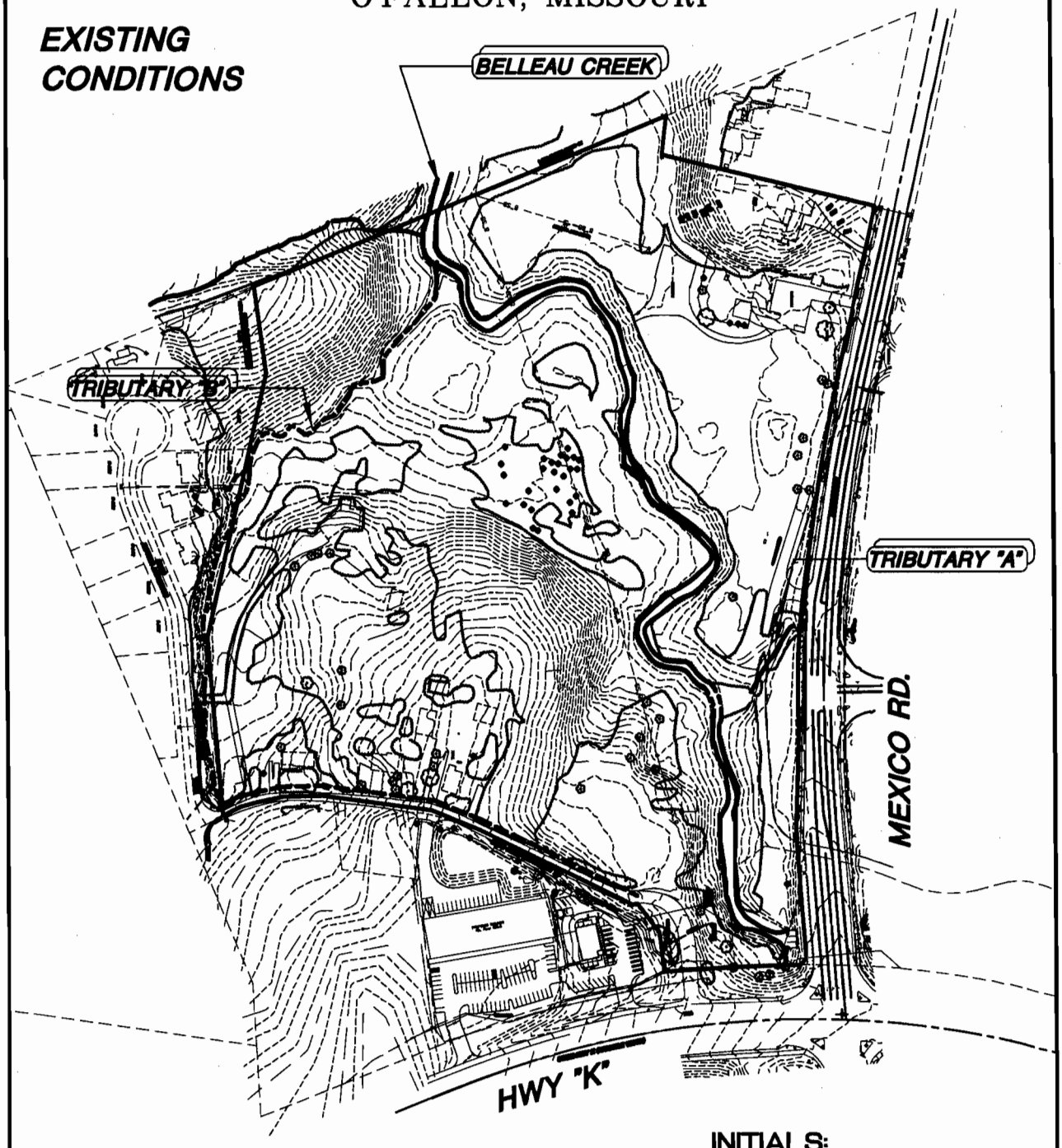
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

EXISTING CONDITIONS



INITIALS:

SCALE: 1"= 300'

0 150 300 600

REVISED: -

SHEET 1 OF 10

S|C E|S ST. CHARLES ENGINEERING & SURV., INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

ORDER NO. 04-1419-01

DATE 01/04/06

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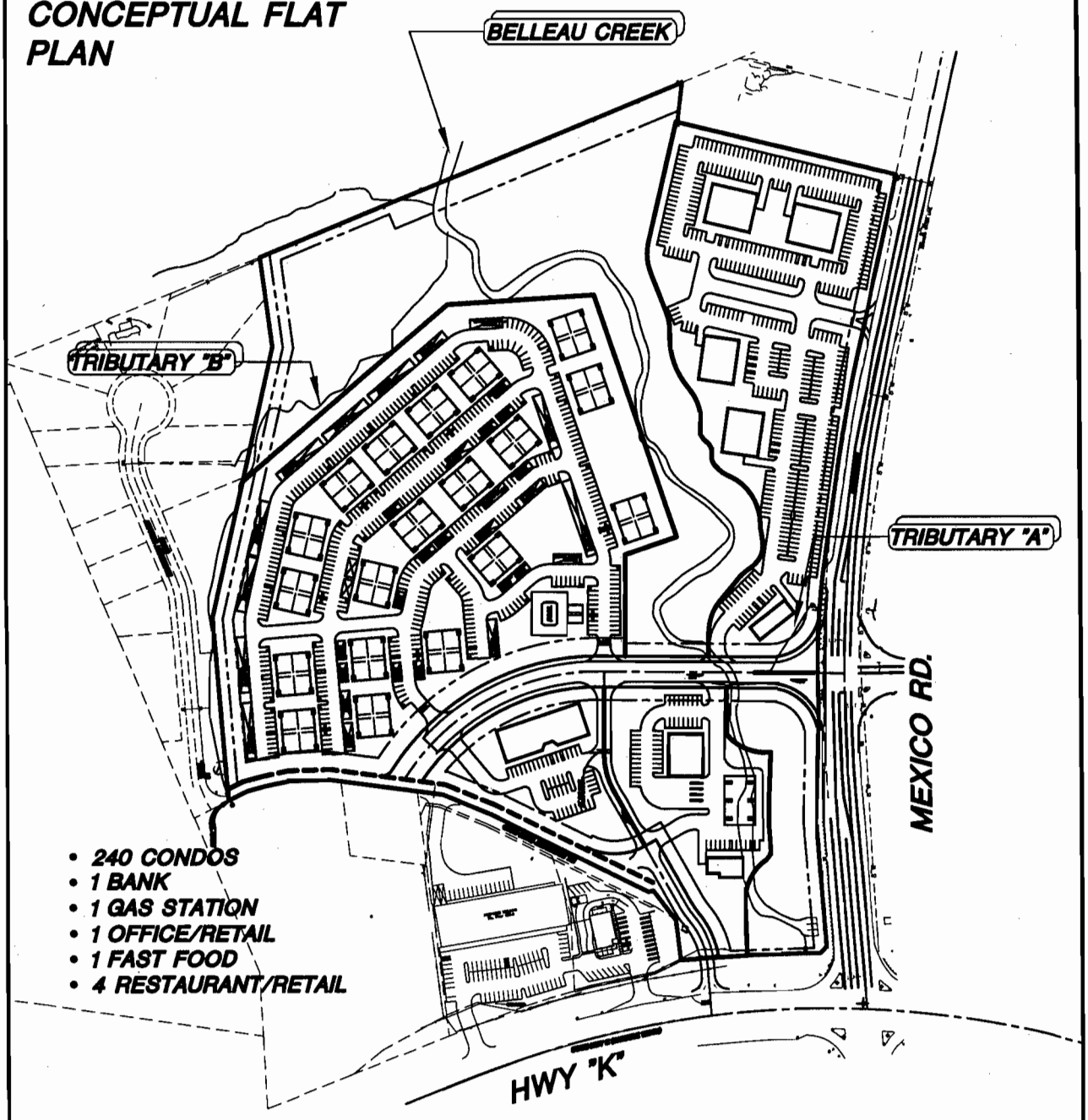
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

CONCEPTUAL FLAT PLAN



INITIALS:

SCALE: 1"= 300'

0 150 300 600

REVISED: -

SHEET 2 OF 10

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DATE 01/24/07

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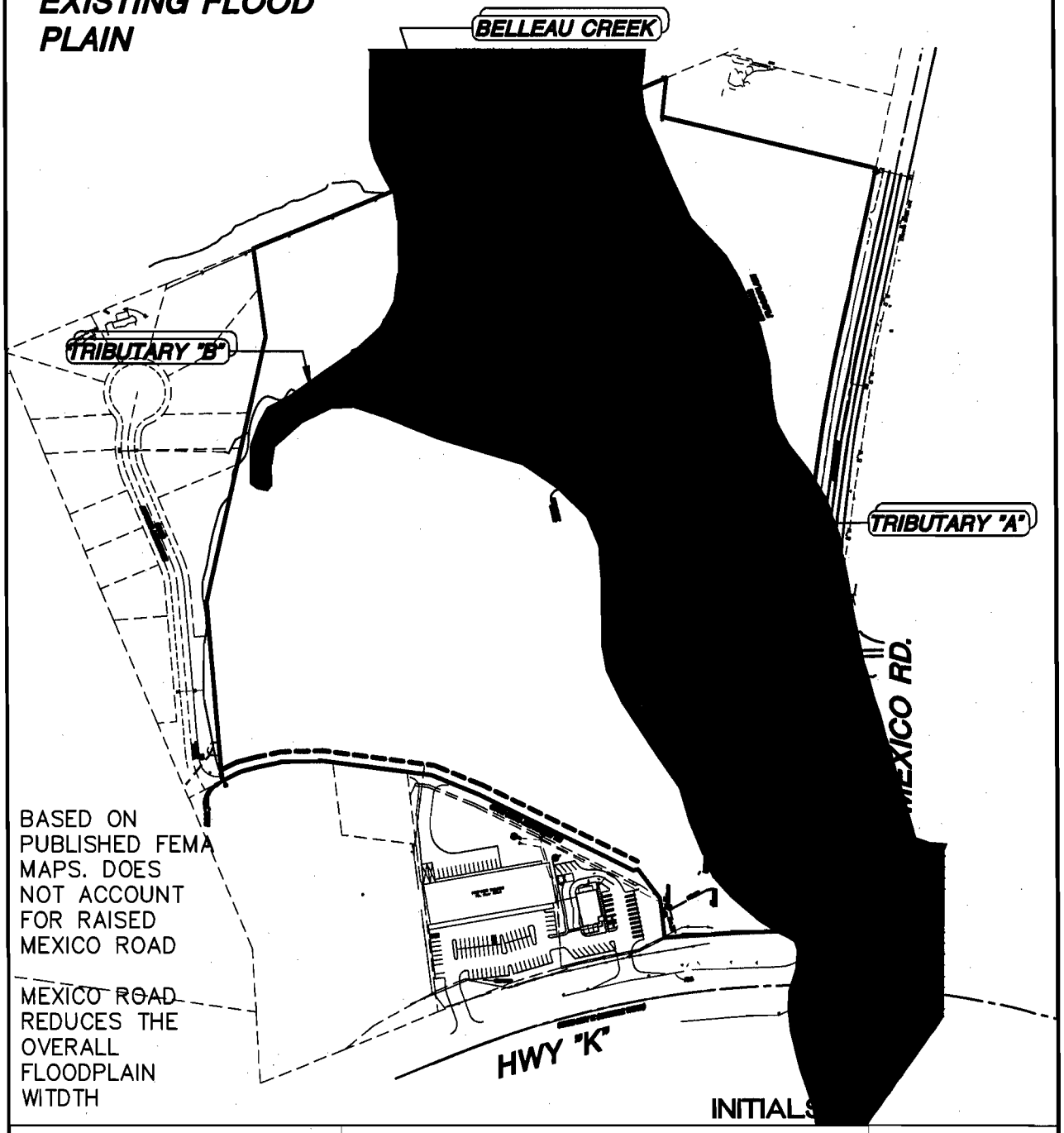
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

EXISTING FLOOD PLAIN



BASED ON PUBLISHED FEMA MAPS. DOES NOT ACCOUNT FOR RAISED MEXICO ROAD

MEXICO ROAD REDUCES THE OVERALL FLOODPLAIN WITDTH

INITIALS

SCALE: 1"= 300'

0 150 300 600

REVISED: -

SHEET 3 OF 10

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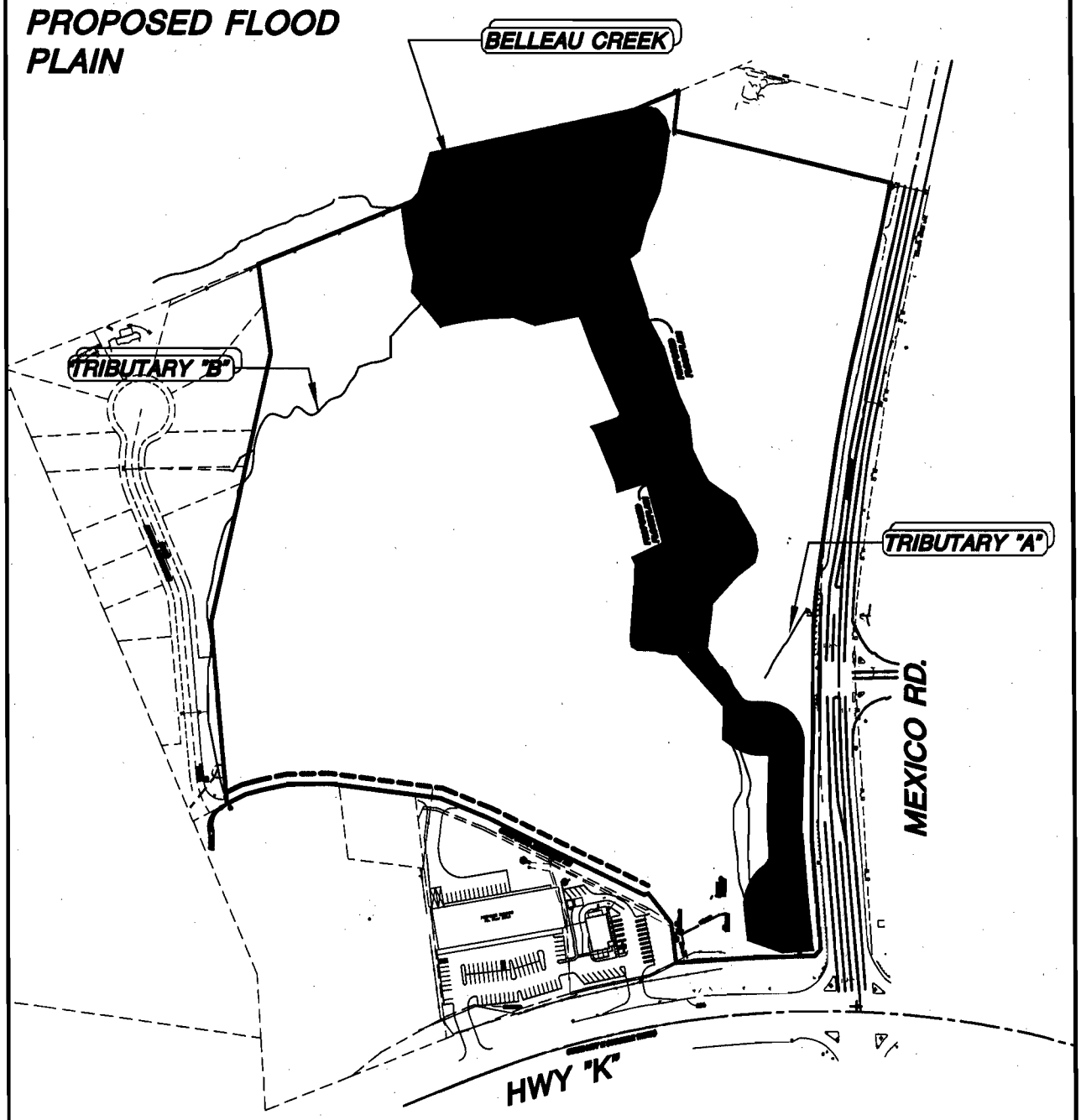
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI



INITIALS:

SCALE: 1"= 300'

0 150 300 600

REVISED: -

SHEET 4 OF 10

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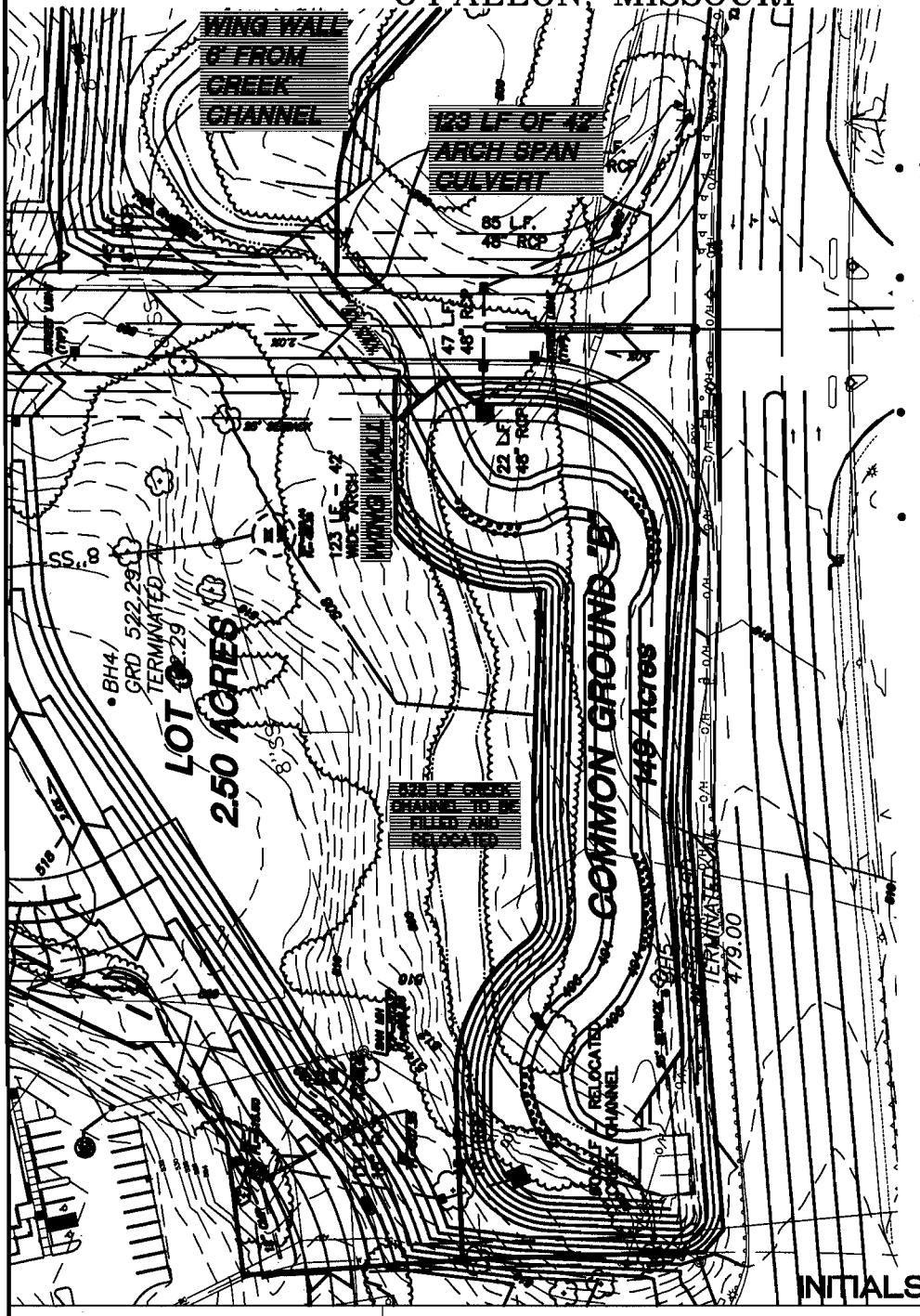
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI



- *123 LF OF CREEK COVERED BY SPAN CULVERT*
- *525 LF OF EXISTING CREEK TO BE RELOCATED*
- *605 LF OF NEW CREEK TO BE BUILT*
- *TOE PROTECTION (BOULDERS) PROVIDED AT OUTSIDE BENDS (4*45LF = 180 LF)*

INITIALS:

SCALE: 1"= 100'

0 50 100 200

REVISED: -

SHEET 5 OF 10

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DATE 01/04/06

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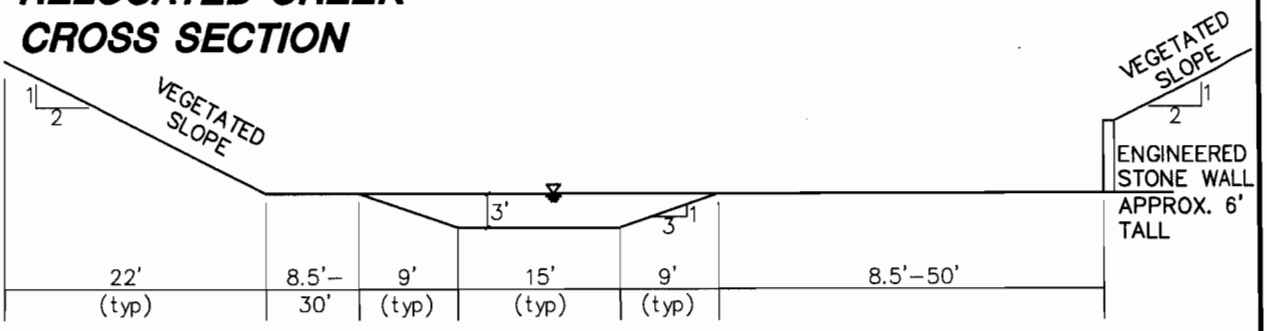
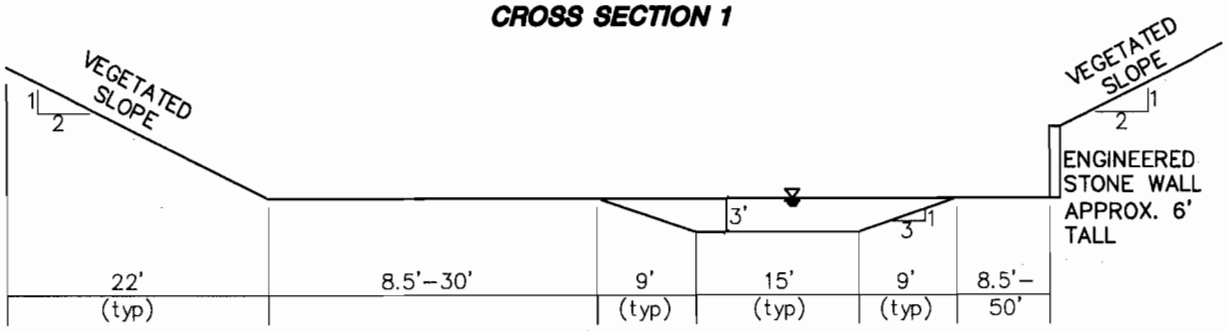
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

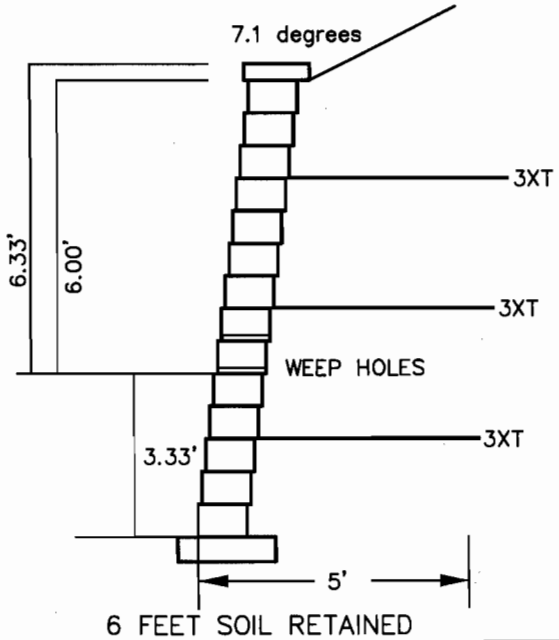
RELOCATED CREEK CROSS SECTION



CROSS SECTION 1



CROSS SECTION 2



- ***ALL RETAINING WALLS ARE PROPOSED TO BE VERSALOC BLOCK WALLS***
- ***FOOTINGS OF WALLS SHALL BE DESIGNED TO PREVENT UNDERCUTTING FROM STREAM BED***
- ***SLOPES AND FLOOD PLAIN WILL BE VEGETATED WITH FLOOD RESISTANT PLANTS AND TREES***
- ***ADDITIONAL ANCHORING DEVICES, (IE. CABLED DEADMAN STRUCTURES) MAY BE EMPLOYED ONCE DESIGN OF WALLS IS FINALIZED.***

INITIALS:

SCALE:

0

REVISED: -

SHEET 6 OF 10

S C E S

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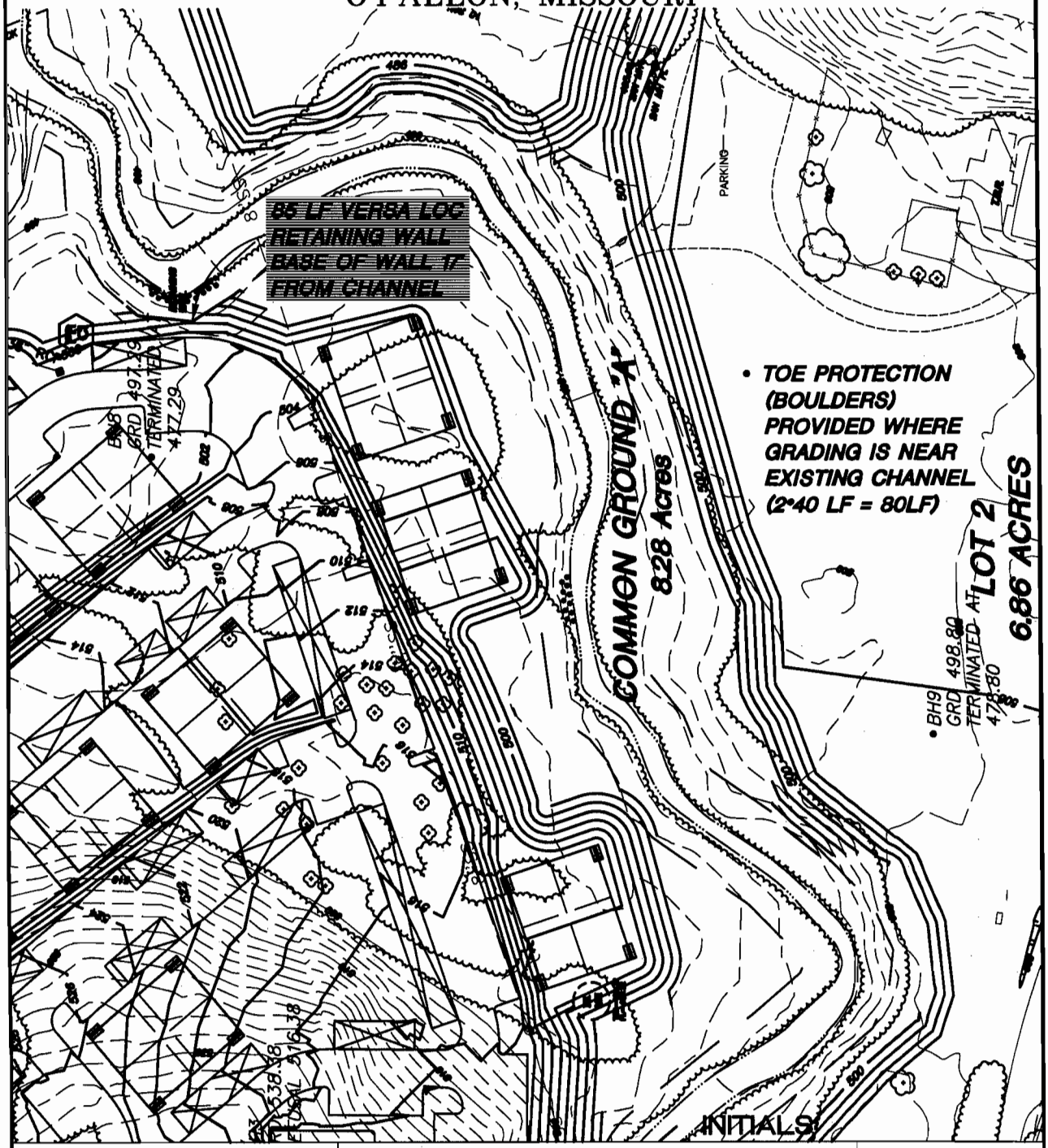
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI



SCALE: 1" = 100'

0 50 100 200

REVISED: -

SHEET 7 OF 10

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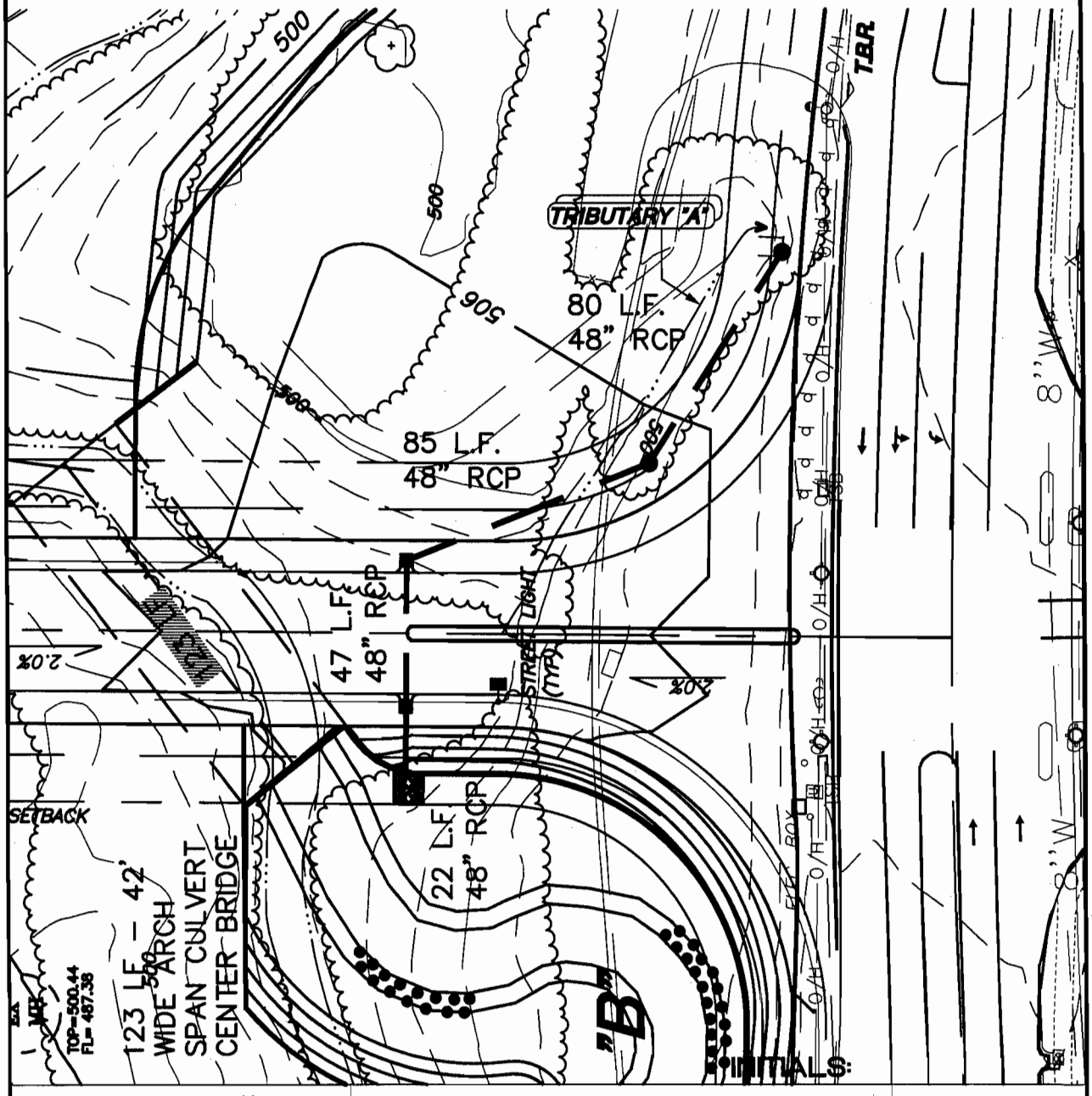
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

TRIBUTARY A (225')
COMPLETELY PIPED



SCALE: 1"= 50'

0 25 50 100

REVISED: -

SHEET 8 OF 10

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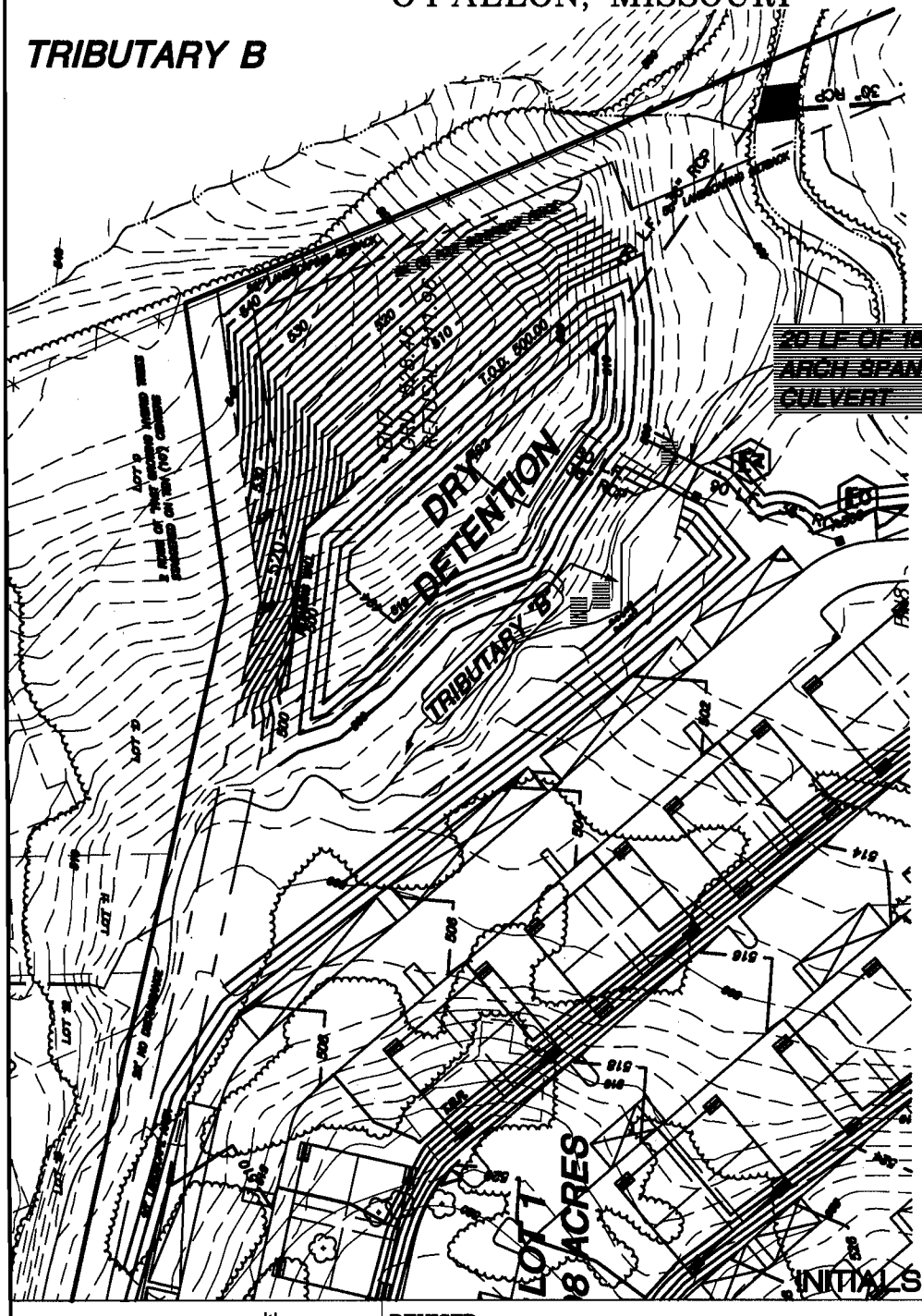
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI

TRIBUTARY B



- ***ORIGINAL 195 LF SPAN CULVERT REDUCED TO 20 LF SPAN CULVERT TO REDUCE IMPACTS ON THE EXISTING TRIBUTARY WHILE STILL PROVIDING ACCESS TO DETENTION POND***
- ***TOE PROTECTION (RIP RAP) PROVIDED WHERE GRADING IS CLOSE TO EXISTING FLOW LINE (20LF)***
- ***FLOWLINE OF EXISTING TRIBUTARY TO BE LEFT UNTOUCHED BY GRADING.***
- ***ALL GRADING TO BE AT LEAST FIFTEEN (15') FT. FROM EXISTING FLOWLINE EXCEPT WHERE TOE PROTECTION IS PROVIDED***

SCALE: 1"= 100'

0 50 100 200

REVISED: -

SHEET 9 OF 10

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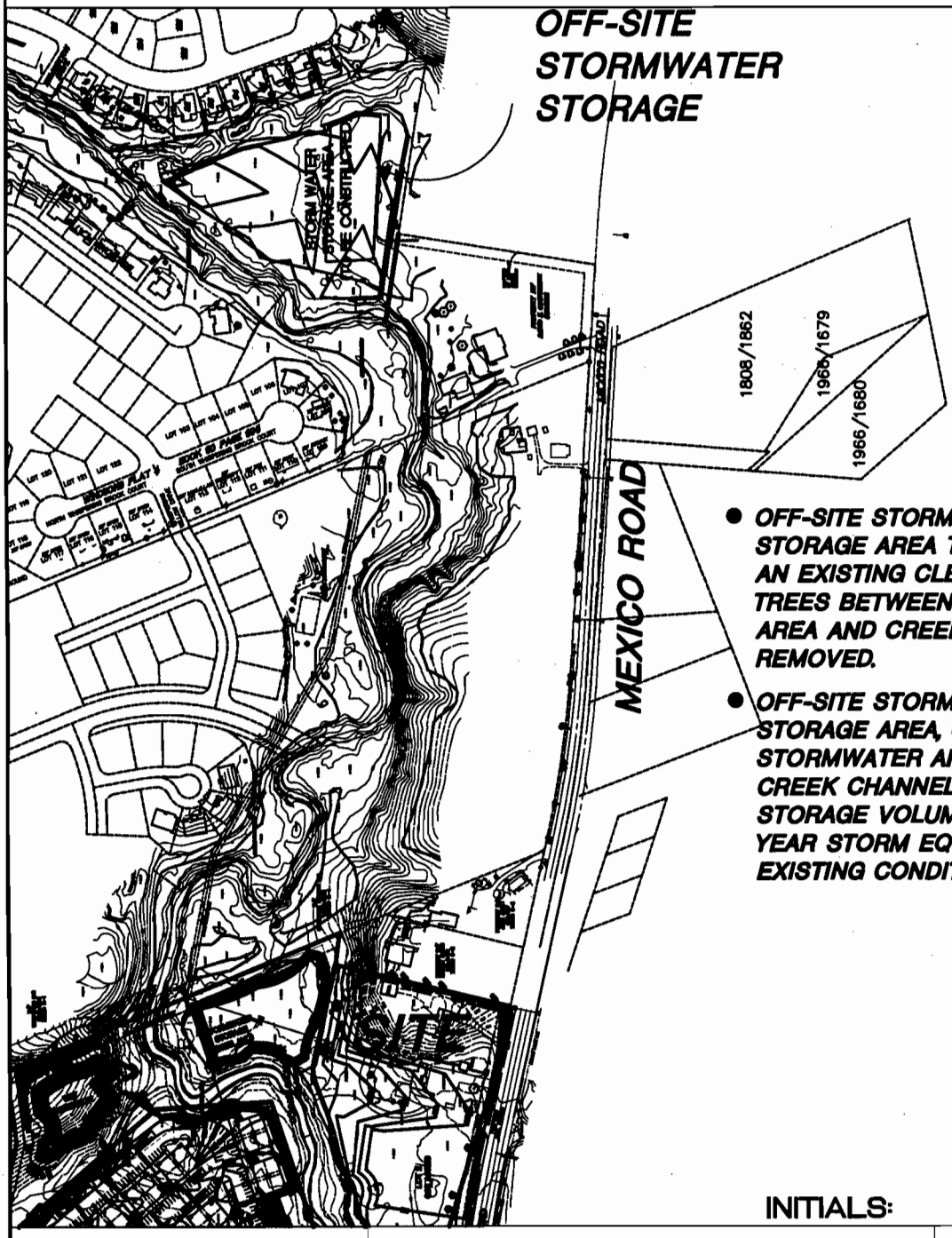
BRAMBLETT CROSSING
BELLEAU CREEK
O'FALLON, MISSOURI



- *OFF-SITE STORMWATER STORAGE AREA TO BE BUILT IN AN EXISTING CLEARING. NO TREES BETWEEN STORAGE AREA AND CREEK TO BE REMOVED.*
- *OFF-SITE STORMWATER STORAGE AREA, ON-SITE STORMWATER AREA AND CREEK CHANNEL PROVIDED STORAGE VOLUME FOR 100 YEAR STORM EQUAL TO EXISTING CONDITIONS.*

INITIALS:

SCALE:
1"= 400'

0 200 400 800

REVISED: -

SHEET 10 OF 10

S|C
E|S
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Photograph 1. Belleau Creek entering site from Mexico Road, facing southwest.

Photograph 2. Belleau Creek, facing northeast.

Photograph 3. Belleau Creek, facing northeast.

Photograph 4. Tributary A viewed from Mexico Road, facing northwest.

Photograph 5. Tributary B, facing west channel from confluence with Belleau Creek.

Photograph 6. Tributary B, facing northwest.

Photograph 9. Emergent wetland swale, facing south-southwest.